

## Description

BP2872 is a non-isolated two buck offline LED driver with PWM dimming. The device operates in critical conduction mode and is suitable for 85Vac~265Vac universal input offline LED lighting.

BP2872 achieves the dimming function by external PWM controlling the P1 pin and P2 pin.

The driver operates in critical conduction mode, the output current does not change with the inductance and LED output voltage. It can achieve precise output current and excellent line regulation.

The BP2872 offers rich protection functions to improve the system reliability, including LED open circuit protection, LED short circuit protection, VCC under voltage protection and thermal shutdown function.

BP2872 is available in SOP-16 package

## Features

- Integrated PWM Dimming Circuit
- Integrated 700V High-voltage JFET Power Supply
- Ultra Low Operating Current
- $\pm 5\%$  LED Output Current Accuracy
- LED Open Protection
- LED Short Protection
- VCC Under Voltage Protection
- Thermal Shutdown Function
- Available in SOP-16 Package

## Applications

- LED ceiling lamp
- LED panel lights
- Other LED Lighting

## Typical Application

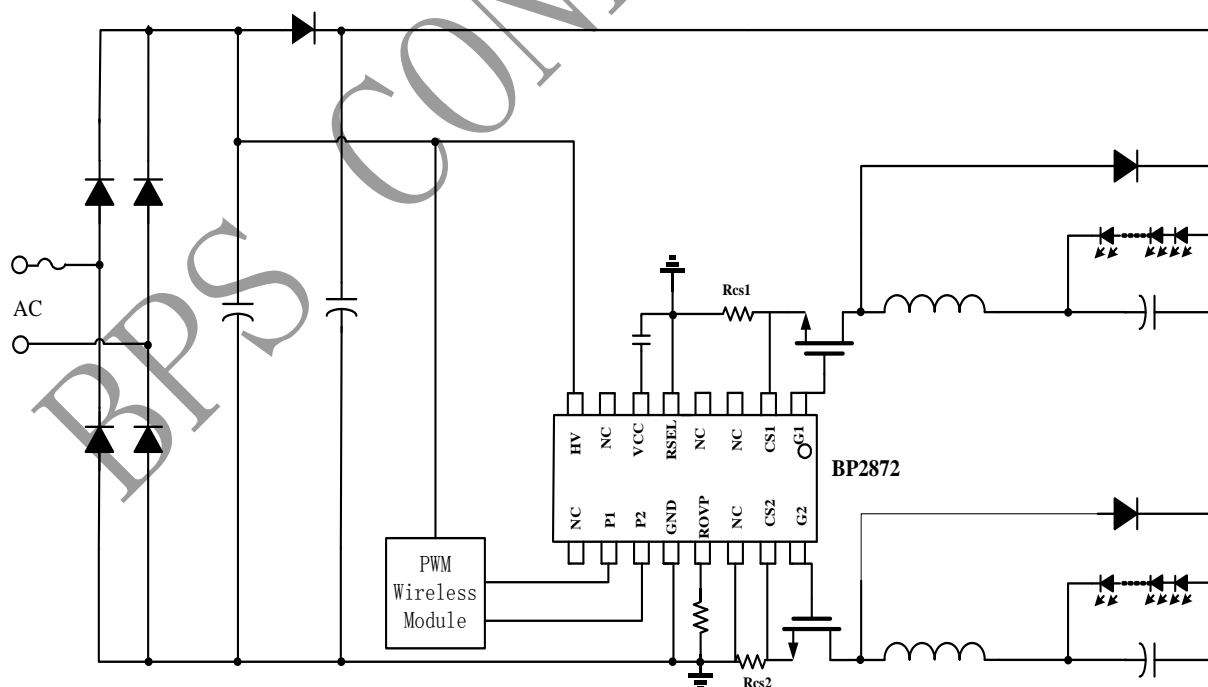


Figure 1. Typical application circuit for BP2872



晶丰明源半导体

# BP2872

Non-isolated Two Way Buck LED Driver With PWM Dimming

## Ordering Information

Part Number	Package	Operating Temperature	Packing Method	Marking
BP2872	SOP-16	-40 °C to 105 °C	Tape 3,000 Piece/Reel	BP2872 XXXXXY XXY

## Pin Configuration and Marking Information

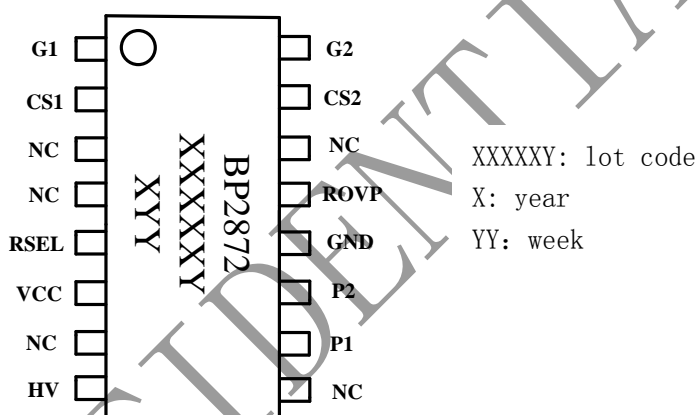


Figure 2. Pin configuration

## Pin Definition

Pin Number	Name	Description
1	G1	Internal buck controller 1 external MOS gate
2	CS1	Current sense Pin1. Connect a sense resistor between this pin and GND pin.
3,4,7,9,14	NC	No connection
5	RSEL	PWM mode select pin Should be connected to GND
6	VCC	Power supply pin
8	HV	High-voltage power supply pin
10	P1	PWM Pin1
11	P2	PWM Pin2
12	GND	Ground